

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Performance Measurements and
Reporting Requirements
for Operations Support Systems,
Interconnection, and Operator Services
and Directory Assistance

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CC Docket No. 98-56
RM-9101

REPLY COMMENTS OF TELEPORT COMMUNICATIONS GROUP INC.

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REPLY COMMENTS OF TELEPORT COMMUNICATIONS GROUP INC.

Teleport Communications Group Inc. ("TCG") hereby submits its Reply Comments regarding the Commission's proposed performance measurements and reporting requirements. Many of the comments demonstrate that adoption of the Commission's proposal is necessary to address competitive local exchange carrier ("CLEC") concerns. However, the proposal will not provide adequate information for facilities-based CLECs unless it is revised to require incumbent local exchange carriers ("ILECs") to report on the provisioning of unbundled network elements to themselves.

I. INTRODUCTION AND SUMMARY

TCG supports the Commission's efforts to develop performance measurements and reporting requirements for monitoring ILEC performance in providing interconnection, unbundled network elements ("UNEs"), and resale services to CLECs. It is imperative that CLECs be able to document whether they are receiving these services in compliance with the performance parity standard required by Section 251(c)(2)(C) of the Communications Act, which requires that

the ILEC provide interconnection to a requesting telecommunications carrier that is "at least equal in quality" to that provided to itself, its affiliates, or any other interconnectors.¹

Many of the commenters agree that reported information is the key to assessing ILEC performance in this regard. The Commission recognized in its NPRM the importance of CLEC ability to assess the manner in which UNEs are provisioned, but apparently presumed that ILECs would be unable to report the self-provisioning of these elements. As commenters demonstrated, however, this is not the case; ILECs do have UNE analogs for which performance may be reported. Thus, the existing proposal must be revised so that ILECs will report on their self-provisioning of network elements. Without this information, facilities-based CLECs will be unable to make the most important assessment -- whether or not the ILEC is treating the facilities-based CLEC equal to itself. Therefore, TCG supports the adoption of uniform performance measurements and reporting requirements that include these important ILEC UNE categories.

In addition, the ILEC reports should be issued monthly on an MSA-basis, which will provide more accurate and timely information regarding the level of ILEC performance. These reports also must include appropriately disaggregated information regarding the ILEC's performance as provided to its affiliate, competing carriers in the aggregate and individually, and retail customers, including a category

¹ 47 U.S.C. § 251(c)(2)(C).

for the ten largest retail customers. Finally, a methodology for statistical analysis that will not hide poor ILEC performance must be adopted, but not until actual data is available to assess the most suitable methodology for this purpose.

II. ILECS MUST BE REQUIRED TO REPORT "UNE" PROVISIONING TO THEMSELVES

ILECs must report separately the measurements for provisioning themselves and their affiliates with individual network elements or their analogs. Inclusion of these categories as part of the Commission's proposal is essential for ensuring that ILECs are providing interconnection in parity with that provided to themselves and their affiliates. If ILECs do not report their own UNE-related information, however, then the burden will be improperly shifted to CLECs to demonstrate that the offering of a particular UNE does not meet the statutory performance parity requirements.

The recent findings of the Texas Public Utilities Commission in its review of Southwestern Bell's ("SWBT") Section 271 application, including over 60 recommendations regarding performance measures and OSS implementation, underscores the importance of providing this information.² The Texas PUC found fault with SWBT's ordering process and concluded that SWBT had not demonstrated that it had achieved even the first phase of flow-through for POTS

² See Investigation of Southwestern Bell Telephone Company's Entry into the Texas InterLATA Telecommunications Market, PUC Project No. 16251, Order No. 25 Adopting Staff Recommendations and Directing Staff to Establish Collaborative

UNE orders.³ Accordingly, the PUC has required SWBT to provide at least three months of data on all performance measurements to demonstrate otherwise and has imposed a number of specific requirements upon SWBT's provisioning and monitoring of OSS.

Moreover, ILECs cannot argue that they do not provide UNEs or UNE analogs to themselves.⁴ AT&T, for example, agrees that there is a reasonable ILEC analog for virtually everything a CLEC could purchase from an ILEC, including UNEs.⁵ Even if such an ILEC analog somehow did not exist according to the FCC proposal, TCG supports MCI's proposal that the ILEC should be required to meet an objective performance benchmark.⁶

III. THE COMMISSION SHOULD ADOPT THE TCG PROPOSAL FOR UNIFORM OSS IMPLEMENTATION STANDARDS

Many commenters agree that there is a need for uniform standards for OSS implementation.⁷ Uniformity would "assure nondiscriminatory treatment for all CLECs, regardless of their chosen market entry strategy" and "enable ILEC

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Process (June 1, 1998) ("Texas PUC 271 Order").

³ Id. at 16-17.

⁴ See Texas 271 Order, Performance Measures Recommendations (requiring measurements for SWBT interconnection trunks).

⁵ AT&T at 39.

⁶ MCI at 22-23.

⁷ See id. at 19-21; AT&T at 14-15; CompTel at 8-9; WorldCom at 4-6; LCI at 2-4.

activities to be measured across state and regional boundaries."⁸ It also would eliminate the need for costly, time-consuming, state-by-state litigation⁹ and give both ILECs and CLECs the assurance of uniform implementation requirements throughout their service territories. Complying with uniform standards would therefore be "less costly and time-consuming for all parties involved,"¹⁰ by permitting carriers to implement a single set of processes for both producing and reviewing the reported information.

In this regard, TCG has proposed that the industry should establish uniform standards for OSS implementation.¹¹ Because of the industry's expertise with OSS and its incentives to create a uniform standard, industry-developed standards would be more efficient and less costly. As many commenters noted, however, any uniform standard must have binding authority upon ILECs and CLECs such that the Commission must retain its authority to enforce an industry implementation plan.¹² Accordingly, the Commission would have oversight responsibility for these standards, setting a timetable for the implementation of any industry standards. TCG believes that its proposal of six-month compliance interval for new standards is fair to the ILECs.

⁸ AT&T at 15.

⁹ AT&T at 16; CompTel at 9; WorldCom at 4-5.

¹⁰ LCI at 5.

¹¹ See TCG at 16-18.

¹² See AT&T at 9; CompTel at 12-13; LCI at 7.

Because the Commission would implement industry standards on a going-forward basis, standards would change as technological advances and other interest require. This would also allow for the flexibility advocated within the New York Department of Public Service's ("NYDPS") "change management" model,¹³ while maintaining the uniform standards that many commenters seek.

IV. REPORTING PARAMETERS

A. The Commission Should Reject Requests for Statewide Reporting

The Commission should require reporting by MSA or on a comparable basis.¹⁴

Any area larger than the MSA threatens the accuracy of the reports and limits TCG's ability to analyze the data; excessively large geographic service areas can disguise violations of the performance parity requirement. On this basis, TCG opposes the efforts of some RBOCs to secure reporting on a statewide basis.

A number of RBOCs claim that they do not have reporting information available at any level other than on a statewide basis,¹⁵ and GTE specifically objects to the "increased costs" of reporting on a smaller geographic basis.¹⁶ To the contrary, however, Sprint reports that its ILECs keep data in geographic units

¹³ Letter of NYDPS (encouraging that the Commission "not adopt model performance standards until the parties have had an opportunity to review the actual data over time").

¹⁴ LCI supports reporting on an MSA basis where relevant, or otherwise on a LATA-basis (at 10). See also WorldCom at 11.

¹⁵ See BellSouth at 16; US West at 26; Ameritech at 19-20.

¹⁶ GTE at 5.

smaller than a state.¹⁷ In addition, for many CLECs, statewide reporting would provide no useful information, given that their service areas tend to be much smaller.¹⁸ Thus, claims that some ILEC records currently are not disaggregated below the statewide level do not provide a sufficient basis for requiring reporting on this widespread basis. Any reporting area larger than an MSA or comparable area would permit unacceptable averaging of results, and thus, misrepresent the effect of ILEC provisioning performance on a CLEC's ability to compete.

B. Reports Must Be Submitted on a Monthly Basis

TCG opposes the suggestion by a number of ILECs that reports only be required on a quarterly basis.¹⁹ These reports must be revised monthly to monitor the level of ILEC service to CLECs. Quarterly reports, on the other hand, would make it difficult to measure trends in poor service provisioning and would unnecessarily delay a CLEC's ability to remedy problems. Such delay is not academic: it results in the loss of potential and existing customers. As GST Telecom describes,

The entry and exit of different carriers in the market is measured in days and weeks, not months or years. Whether or not new entrants have reliable,

¹⁷ Sprint at 7.

¹⁸ See MCI at 28 ("Therefore, insufficient disaggregation of this information would place CLECs at a competitive disadvantage when trying to ascertain the level of service that they are receiving in similar geographic locations from their most formidable competitors.").

¹⁹ See, e.g., Ameritech at 85; U S West at 33.

effective and nondiscriminatory access to the operations support systems of ILECs ultimately will determine their success or failure in the market.²⁰

Thus, it is more important that ILEC performance levels be identified early and reported, rather than left to ILEC monitoring and correction, as proposed by Ameritech.²¹

Monthly reporting should not impose any undue burden on ILECs. Both BellSouth and SBC already report on this basis,²² and SBC advocates monthly reporting as "the minimum required reporting time frame."²³ Therefore, the Commission should require monthly, rather than quarterly, reports.

V. THE REPORTS MUST BE SUFFICIENTLY DISAGGREGATED TO ENSURE ACCURATE AND USEFUL PERFORMANCE INFORMATION

In its comments, TCG agreed with the Commission's proposal that an ILEC should report separately on its performance as provided to: (1) its own retail customers; (2) any of its local exchange affiliates; (3) competing carriers in the aggregate; and (4) individual competing carriers,²⁴ and proposed that an additional category -- the ILECs' ten largest commercial customers -- be added.²⁵ TCG opposes the efforts of some commenters to aggregate the reporting requirements, which would diminish their usefulness. For example, BellSouth argues that the

²⁰ GST Telecom, Inc. at 10.

²¹ Ameritech at 85.

²² BellSouth at 32; SBC at 23.

²³ SBC at 23.

²⁴ See LCI at 9; Sprint at 7.

²⁵ These categories also presume that the ILEC reports include categories for self-

proposed product level disaggregation is "excessive" and should instead be developed by carriers and state commissions (at 17). U S West argues that reporting on UNE provisioning, resale, and collocation for its affiliates is not required because its nondiscrimination obligation as between affiliates and CLECs extends only to interconnection (at 28). U S West's claim, however, ignores its ongoing obligation to provide nondiscriminatory access to UNEs. Thus, its argument that UNE analog reporting does not apply to UNE provisioning, resale, and collocation for its affiliates fails.

Only reporting at the level proposed by the Commission, with TCG's modification, will provide sufficiently disaggregated information so that the CLEC can assess whether it is receiving services on parity with the ILEC and other competitors. Similar to geographic reporting levels, unless the reports are not sufficiently disaggregated, they will tell CLECs and commissions very little about the true status of ILEC provisioning to CLECs.

VI. THE COMMISSION SHOULD ADOPT A STATISTICAL METHOD WHEN SUFFICIENT DATA ARE AVAILABLE TO COMPARE THE METHODS

The Comments suggest that while parties agree on the need for adopting statistical methods, the issue is not ripe for final decision on which method to adopt.²⁶ Public data currently do not exist to make a specific recommendation for

(continued...)

provisioning of UNEs.

²⁶ See, e.g., BellSouth at 33.

the appropriate statistical procedures,²⁷ and until reports are made available, only the ILEC knows how the distributions will be skewed for each measure, the variability in the data or in the test statistic for each measure, and the sample sizes. Therefore, principles of sound policymaking advise against adopting, at this point, any method of statistical evaluation, which, without the appropriate verification, would be more likely to favor one set of interested parties over another.

In furtherance of competition, the most important judgment that regulators will be required to make is whether or not an ILEC is providing service to a CLEC, pursuant to Section 251(c). Enforcement of Section 251 will be an ongoing responsibility of regulators, and statistical analysis provides the factfinder with a tool to ensure that both the CLEC and ILEC experience fair, non-capricious adjudication of a specific complaint.

In this regard, the primary requirement of any statistical method or procedure is to minimize to the extent practical the incidence of either a Type I error (erroneous finding that the ILEC is out of compliance) or a Type II error (erroneous finding that the ILEC is in compliance).²⁸ In its original proposal, TCG stated that a CLEC is entitled under Section 251 to experience a level of service quality exactly

²⁷ For example, SBC supports an unworkable and vastly premature system that would allow for the accumulation of credits for performance that is "statistically superior" (at 30). Under this plan, any ILEC that accumulates some number of credits presumably would then have a "free pass" for subsequent egregious behavior. The Commission should reject this ludicrous suggestion out of hand.

²⁸ Type I and Type II errors as used herein are described in TCG's White Paper

the same (or at least no less) as that which the ILEC provides to itself: perfect performance parity ("PPP").²⁹ For TCG to be able to conduct its business on a level playing field with reasonable certainty TCG must be assured of receiving PPP or a reasonable approximation of it, for every measure and in every location where it provides services.³⁰

(continued...)

Measuring Performance Parity: Equal Risk, Fair Results.

²⁹ Of course, a CLEC might voluntarily waive its right to PPP for practical reasons in certain circumstances. However, in no event could TCG accept a statistical method that imposed a greater risk that the ILEC would be erroneously and harmfully found to be in compliance (modified Type II error), than the risk that the ILEC would be erroneously found out of compliance (Type I error). "Erroneously and harmfully found to be in compliance" refers to a modified version of the traditional Type II error, describing a situation during any sampling period when the statistical test fails to reject the incorrect null hypothesis of equal service but clearly shows that TCG received inferior service during the sampling period. The traditional Type II error includes the possibility of failing to reject an incorrect null hypothesis while at the same time TCG received superior service -- a situation that TCG does not view as harmful. When 100 percent of all incidents are reported during a sampling period, statistical methods are not required to determine whether a CLEC actually received inferior, equal or superior service.

³⁰ The ideal for 251 purposes would be to specify for each measure the smallest deviation from PPP that is unacceptable to CLECs -- that is, to specify a "D" for every measure. Conceptually, "D" represents a difference in, say, the population means that, if actually present, will harm TCG's ability to compete fairly. The values for "D" could be established in a number of ways. First, "D" could be established by thoughtful consideration, metric-by-metric, of the practical consequences of small deviations in parity. Second, it could be established as a common percentage of an ILEC's prior month's average. However, a common percentage could make Type I and modified Type II risks unnecessarily large where there is a lot of variability inherent in the system. When there is a lot of variability ("noise," from a customer's perspective) 20 percent or more might be appropriate for D, because a customer could not perceive the difference in quality between the ILEC and CLEC very easily. When there is very little variability in the system, five percent might be more appropriate. Third, to avoid the pitfalls of a common

Based on current knowledge of the data that must be analyzed, no compelling reason exists to specify at this time any particular test for the individual metrics.³¹ TCG recommends instead a two-part process for the adoption of a

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percentage, the percentage could be scaled according to the variability in the system as measured in the prior month(s), i.e., one could multiply the common percentage by the previous month's standard deviation for a given metric to obtain a percentage to use for that metric.

Other parties have suggested statistical procedures that are inadequate to test for metric-by-metric compliance. For example, choosing a specified level of significance, five percent, in an attempt to strike a balance between Type I and Type II errors does not, in fact, do so for each metric. A balance of errors for one metric will most certainly be different from the balance of errors for a different metric. Five percent could not balance both. While possibly appropriate for developing an efficient aggregate test, this procedure does not develop an effective method for evaluating PPP for Section 251 purposes.

³¹ In fact, there seems to be ample reason not to do so, owing to the ignorance of the distributions the data will reveal, as well as the unique nature of the analysis that must be performed. Asymmetric distributions of a statistic are expected to be common, but not necessarily ubiquitous. If normality assumptions prove to be reasonably valid, then more efficient statistical methods could be used. "Efficient statistical methods" are those that gain more information from a fixed sample size than would less efficient statistical methods. The implication here is that methods that are more efficient will result in less risk of making errors of inference. Given that data are precious, we should strive to make the best possible use of them.

To the argument that nonparametric methods can be used instead of parametric methods, so that distributions do not affect results, TCG responds that nonparametric methods are less efficient. The analyst does not learn as much from the same amount of data as would be the case using parametric methods. The analysis could be relatively simple but an imprecise answer could result in serious harm to competitors. For example, if a nonparametric test (such as permutation analysis) is used, when in fact, a parametric test would be appropriate, the risk of the modified Type II error would be larger for any given level of risk of a Type I error. (One should bear in mind that, *ceteris paribus*, the risk of a Type I error and a modified Type II error are inversely related. The smaller the risk of a Type I error, the greater the risk of a modified Type II error.) The nonparametric test would have lower power to detect violations of the parity requirement.

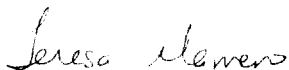
statistical method. First, the Commission should find that any statistical approach must balance risks of Type I and modified Type II errors. Second, a proceeding should be established to select from among the qualified statistical methods based on their appropriateness and efficiency. Data should be collected and analyzed both by the ILECs and CLECs, using different statistical procedures to assess the respective results. No decision should be made regarding any particular statistical method(s) until experience indicates which can best balance the risks of Type I and modified Type II errors, while making the most efficient use of the data.

VII. CONCLUSION

Based on the foregoing and its Comments, TCG respectfully requests that the Commission adopt the performance measurements and reporting requirements with the modifications supported by TCG.

Respectfully submitted,

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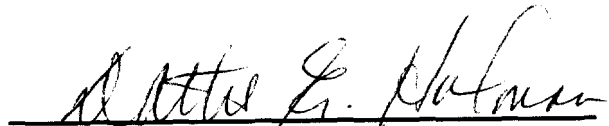
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